



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,621	10/24/2001	Brig Barnum Elliott	01-4034	2499
28120	7590	01/31/2007	EXAMINER	
FISH & NEAVE IP GROUP ROPES & GRAY LLP ONE INTERNATIONAL PLACE BOSTON, MA 02110-2624			SAM, PHIRIN	
			ART UNIT	PAPER NUMBER
			2616	
SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE		DELIVERY MODE	
3 MONTHS	01/31/2007		PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

10

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/039,621	ELLIOTT, BRIG BARNUM	
	<b>Examiner</b>	<b>Art Unit</b>	
	Phirin Sam	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 06 November 2006.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-4,8-16,18-28,30-32,38,39,41-43 and 48-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 1-4,8-16,18-28,30-32,38,39,41-43 and 48 is/are allowed.
- 6) Claim(s) 49-57 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 24 October 2001 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**PHIRIN SAM**  
**PRIMARY EXAMINER**

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date <u>01/16/07</u> .	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 49, 50, 52-55, and 57 rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 7,099,951 (hereinafter referred as “Laksono”).

**Regarding amended claims 49, 50, 52, and 53,** Laksono discloses a programmable radio comprising:

(a) at least two functional modules (see Fig. 6, elements 12 and 22, col. 11, lines 25-37),  
wherein

(i) at least two functional modules execute programmed instructions to provide respective functional aspects of the radio (see Fig. 12, elements 150 and 152, col. 21, lines 14-27, and col. 24, lines 12-18, 60-67);

(ii) at least one of the modules receives a stream of input data and segments the stream of input data into data packets (see Fig. 7, col. 24, lines 12-45);

(iii) a second of the modules receives the data packets into buffers therein and assembles the data packets from the buffers for transmission from the radio as a stream of output data corresponding to the stream of input data (see Fig. 12, col. 24, lines 12- 45);

- (iv) the at least two functional modules include respective network controllers adapted for communicating among the at least two functional modules according to packet network protocols (see Fig. 7, col. 14, lines 34-44);
- (b) an internal network adapted for packet network protocol communication connecting the at least two functional modules (see Fig. 7, element 192, col. 14, lines 34-44).

**Regarding claim 54, 55, and 57,** Laksono discloses a computer-readable medium containing instructions for controlling a computer system to implement a programmable radio, by:

- (a) controlling at least two functional modules of the radio to execute instructions to provide respective functional aspects of the radio, wherein controlling the at least two functional modules includes (see Fig. 12; elements 150 and 152, col. 21, lines 14-27, and col. 24, lines 12-18, 60-67);
- (b) controlling at least one of the modules to receive a stream of input data and segment the stream of input data into data packets (see Fig. 7, col. 24, lines 12-45);
- (c) controlling a second of the modules to receive the data packets into buffers therein and assemble the data packets from the buffers for transmission from the radio as a stream of output data corresponding to the stream of input data (see Fig. 12, col. 24, lines 12-45);
- (d) controlling respective network controllers of the at least two functional modules to implement packet-based communication protocols, thereby providing packet network connectivity over an internal network connecting the at least two functional modules (see Fig. 7, element 192, col. 14, lines 34-44).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 51 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 7,099,951 (hereinafter referred as “Laksono”) in view of US Patent 5,157,390 (hereinafter referred as “Yoshie”).

**Regarding claims 51 and 56,** Laksono does not disclose IEEE 802. However, Yoshie discloses IEEE 802 (see Figs. 1b and 1c, col. 5, lines 9-26). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine IEEE 802 teaching by Yoshie with Laksono. The motivation for doing so would have been to provide flexible network service read on column 1, lines 48-50. Therefore, it would have been obvious to combine Yoshie and Laksono to obtain the invention as specified in the claims 51 and 56.

***Allowable Subject Matter***

5. Claims 1-4, 8-16, 18-28, 30-32, 38, 39, and 41-43 are allowed.

***Response to Arguments***

6. Applicant's arguments with respect to claims 49-57 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phirin Sam whose telephone number is (571) 272-3082. The examiner can normally be reached on a compress schedule, from 8:00-5:30, first Wed off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571) 272 - 3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Respectfully submitted,

Date: January 29, 2007



**PHIRIN SAM  
PRIMARY EXAMINER**